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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/806,810	03/23/2004	David I. Suda	D0932-00444	2913

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EXAMINER	
YAO, SAMCHUAN CUA	
ART UNIT	**PAPER NUMBER**
1733	

DATE MAILED: 06/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/806,810	SUDA ET AL.	
	Examiner	Art Unit	
	Sam Chuan C. Yao	1733	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *26 April 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,3-6,8,9,12,15,16,36 and 41-51* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,3-6,8,9,12,15,16,36 and 41-51* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *05-22-06*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Specification

1. A proposed amendment to the specification in numbered paragraph 46 has been accepted.

Information Disclosure Statement

2. The references cited by Applicant on the 1449's have been made of record.

While the statements filed clearly do not comply with the guidelines set forth in MPEP 2004 regarding both the number of references cited and elimination of clearly irrelecant art and marginally pertinent cumulative information, compliance with these guidelines is not mandatory. Furthermore, 37 CFR 1.97 and 1.98 do not require that the information be material, rather they allow for submission of information regardless of its pertinence to the claimed invention. Also, there is no requirement to explain the materiality of submitted references, however, the cloaking of a clearly relevant reference by inclusion in a long list of citations may not comply with Applicant's duty of disclosure, see Penn Yan Boats, Inc. v. Sea Lark Boats Inc., 359 F. Supp. 948, aff'd 479 F. 2d. 1338.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1,3-6, 8-9,12,15-16, 36, and 41-51 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

While there is support in the original disclosure for using a glass non-woven tissue for a covering non-woven layer (13), there is no sufficient support for using tissue for a reinforcing non-woven which is disposed between a pair of insulating

layers as presently recited in the claims. The original disclosure fails to reasonably convey to one in the art that applicant has in possession for using the same material (tissue) for both a covering nonwoven layer and a reinforcing nonwoven web.

Moreover, as far as the Examiner can tell, no express support can be found for the newly added limitation "... said tissue layer has a tensile strength along said length greater than the tensile strengths of said insulation layers" (emphasis added) per claim 49, without any guidelines/guidance from Counsel/Applicant as to where support might be found, this engenders a New Matter situation.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 1, 3-5, 8-9, 12, 36, 43 and 49-51 are rejected under 35 U.S.C. 103(a) as being unpatentable over Meier et al (US 5,169,700).

With respect to claims 1 and 36, Meier et al discloses a faced fiber glass insulating blanket for aircraft hulls, the blanket comprises a pair of resin-impregnated fiber-glass insulating batts and a porous non-woven web between and contiguous to the fiber-glass insulating batts; wherein the non-woven web comprises inorganic fibers having a flame retardant characteristic and further wherein non-woven web is *"strong, tear resistant and lightweight"* (col. 1 lines 6-

68; col. 3 lines 23-59; col. 4 lines 65; col. 5 lines 15-38; figures 6-7). While it is acknowledged that the inorganic non-woven web is not characterized by Meier et al as a non-woven tissue as recited in claim 1, nonetheless the term (i.e. tissue) is taken to read on a non-woven web, because applicant fails to positively define this term, and this term is defined broadly in Webster's New Collegiate Dictionary 2nd edition as simply *"a web"*. Moreover, while not explicitly disclosed, it is understood that the inorganic non-woven web in Meier et al is taken to comprise randomly oriented inorganic fibers. In any event, such would have been obvious in the art, because air-laid inorganic fibers is an art recognized effective and convenient way for making air-permeable non-woven web.

Meier et al does not teach using glass fibers for the inorganic non-woven web. However, it would have been obvious in the art to use fiber glass in forming the inorganic non-woven web suggested by Meier et al, because: a) it is desired in Meier et al to form an insulating blanket for aircraft, which has an improved "tensile strength" without impairing its insulating ability and without adding significantly to its cost or weight" (col. 1 lines 64-68); and b) glass fibers are relatively low cost and readily available inorganic fibers commonly known in the art for having a good flame retardant and thermal insulating characteristics and for providing an excellent strength to weight ratio to a finished non-woven web.

As for the recited relative thickness between insulating layers and a porous non-woven web, see figures 1-7 of the Meier et al patent.

With respect to claims 3-5 and 8, see inorganic nonwoven web layers (38) in figures 4 and 6-7 of the Meier et al patent.

With respect to claim 9, the R-values recited in this claim are typical R-values for insulating batts. One in the art would have chosen a desired R-value for the desired end-use of a finished insulating batt.

With respect to claim 12, while Meier et al teaches using an oven to cure a resin binder, Meier et al is silent on the curing temperature of the resin. However, resin binders, which are suitable for binding glass fibers and have the recited curing temperature are well known and conventional in the art. Since it is well within the purview of choice in the art choose from among well known resin binders for glass fibers in the art, this claim would have been obvious in the art. Note: the melting range of typical glass fibers is significantly higher 600 °F.

With respect to claim 43, see column 2 lines 5-14.

With respect to claims 49-51, the limitations in these claims are substantially mere repetition of the limitations in the above recited claims, for the same reasons set forth above, the repeated limitations would have been obvious in the art. As for the added limitation in claims 49 and 51, as noted above, it is desired in Meier to use a non-woven web which is *"strong, tear resistant and lightweight"* (col. 5 lines 15-38), and discloses that the facing sheet *"improves the tensile strength of the insulation product and increases its stiffness"* (col. 2 lines 20-23). Moreover, since the fibers in an insulation fibrous batt are not strongly bonded (in fact, the batt would tear readily by application manual tensile force), the

nonwoven web must naturally have a tensile strength, which is greater than the tensile strength of the batt. Moreover, see column 2 lines 5-21 for the recited batt thickness. As for the thickness of a tissue reinforcing web, Meier et al also teaches a film to encase an insulating batt. The recited thickness is typical in the art for a film. The teachings of Meier et al would have reasonably suggested to one in the art that the thickness of a nonwoven facing web would not significantly deviate from the thickness of a covering film. For these reasons, claim 50 would have been obvious in the art.

7. Claims 15-16 and 41-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Meier et al (US 5,169,700) as applied to claim 1 or 36 above, and further in view of Knapp et al (US 5,848,509).

Since Knapp et al, drawn to making an encapsulated insulating batt, teaches bonding a covering nonwoven web on a 1st major surface of an insulating batt and for bonding a kraft paper onto a 2nd major surface of the batt using a bituminous material (col. 3 line 38 to col. 4 line 13; figures 3-4) in order to retard moisture into the fibrous insulating layer thereby preventing the degradation of the fibers in the insulating layer.

Allowable Subject Matter

8. In the event that Applicant is able to provide support to the presently claimed subject matter (i.e. overcome the 35 USC 112 1st paragraph), the following is a statement of reasons for the indication of allowable subject matter: there is no suggestion in the art to modify a fibrous insulating article comprising "... *reinforcing*

glass tissue layers disposed between first and second insulation layers ... whereby said insulation product is separable at an interface of said reinforcing layers ..." (emphasis added).

Response to Arguments

9. Applicant's arguments with respect to claim 1 has been considered but are moot in view of the new ground(s) of rejection.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sam Chuan C. Yao whose telephone number is (571) 272-1224. The examiner can normally be reached on Monday-Friday with second Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Richard Crispino can be reached on (571) 272-1171. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Sam Chuan C. Yao
Primary Examiner
Art Unit 1733

Scy
06-09-06